

• We claim:

1. A system for executing a financial transaction to purchase or sell a plurality of financial instruments, the system comprising:

a memory adapted to store a plurality of orders or quotations to purchase or sell the financial instruments, the orders or quotations including at least one complex order, the complex order including a plurality of legs, each leg being an order to purchase or sell at least one of the financial instruments;

a processor coupled with the memory; and

a matching algorithm coupled with the processor and adapted to match the each leg of the complex order with other orders or quotations stored in the memory.

2. The system of claim 1, wherein matching each leg of the complex order is contingent on matching all of the legs of the complex order.

3. The system of claim 1, wherein the complex order further comprises a net price and wherein the matching algorithm matches the complex order based on the net price.

4. The system of claim 1, wherein the plurality of financial instruments includes options contracts.

5. The system of claim 4, wherein the plurality of financial instruments includes at least one order to purchase or sell stock underlying the options contract.

6. The system of claim 1, wherein the plurality of financial instruments includes at least one futures contract.

7. The system of claim 6, wherein the plurality of financial instruments includes an amount of a commodity underlying the futures contract.

8. The system of claim 1, wherein the processor is adapted to periodically monitor the memory to determine if the complex order can be matched.

9. The system of claim 1, further comprising a data interface coupled with the processor, the data interface adapted to receive best price information and wherein the matching algorithm is adapted to execute each leg of the complex order at a best price.

10. The system of claim 1, wherein the processor is adapted to monitor the memory to determine if the complex order can be matched on the occurrence of a market event.
11. The system of claim 10, wherein the market event includes a change in best price information.
12. The system of claim 10, wherein the market event includes the storage of a new order or quotation in the memory.
13. The system of claim 1, further comprising an arrival delay timer, the arrival delay timer delaying execution of the matching algorithm for a period time from when the complex order is stored by the memory.
14. The system of claim 1, wherein a plurality of second complex orders are stored in the memory, and wherein the matching algorithm is further adapted to identify a best inverse complex order corresponding to the complex order from among the second complex orders.
15. The system of claim 14, wherein the plurality of complex orders each include a net price and wherein complex orders with more favorable net price are ranked with a higher execution priority.
16. The system of claim 14, wherein complex orders from non-professionals are ranked with a higher priority for execution than complex orders received from professionals.
17. The system of claim 14, wherein the complex orders stored earliest in time are ranked with a higher priority for execution than complex orders stored later in time.
18. The system according to claim 1, further comprising an execution processor coupled with the complex order processor and adapted to execute the complex order when the net price of the complex order is met or improved by either the net price of the second complex order or by the prices of the corresponding regular orders.
19. The system of claim 2, wherein the optimal price information reflects prices for the option contract on at least one away market.

20. The system of claim 1, wherein a number of option contracts for at least one leg of the complex order is a ratio of a number of option contracts for at least one other leg of the complex order.
21. The system of claim 10, wherein the matching algorithm is adapted to match a portion of each leg of the complex order based on the ratio.
22. The system according to claim 8, wherein the complex order is received from a customer, further comprising an obvious price error algorithm coupled with the execution processor and adapted to prevent execution of the complex order against the second complex order if a price improvement by the second complex order is greater than an error prevention value.
23. The system according to claim 1, wherein the net price of the complex order is determined from a current market price for each leg of complex order.
24. A system for matching complex orders to purchase or sell a plurality of financial instruments, the system comprising:
a memory adapted to store a plurality of orders or quotations to purchase or sell complex orders and regular orders;
a processor coupled with the memory to identify matches between complex orders and regular orders; and
a matching algorithm coupled with the processor and adapted to match each leg of the complex order with regular orders in a single transaction at a single net price, wherein the quantity of each leg of the complex order traded against the regular orders is consistent with the complex order's ratios, and wherein the regular orders traded against the complex order are selected based on an allocation algorithm pursuant to which each leg is allocated first to any customer orders and next to professional orders and quotations with larger size.
25. A system for matching complex orders to purchase or sell a plurality of financial instruments, the system comprising:
a memory adapted to store a plurality of orders or quotations to purchase or sell complex orders and regular orders;
a processor coupled with the memory to identify matches between complex orders and regular orders; and

a matching algorithm coupled with the processor and adapted to match each leg of the complex order with regular orders in a single transaction at a single net price.